

ES EXECUTIVE SUMMARY

This executive summary provides an overview of the Draft Environmental Impact Statement (DEIS) for the SR-262; Montezuma Creek to Aneth project. The executive summary includes:

- A description of the project area
- The project Purpose and Need
- A description of the proposed action and alternatives
- A table summarizing potential environmental impacts
- A list of permits and clearances required for the proposed action
- A list of key laws and regulations with which the SR-262 project must comply

ES.1 PROJECT AREA

The official name for this project is State Route (SR-) 262; Montezuma Creek to Aneth. Since the project was originally identified in the Utah Department of Transportation (UDOT) State Transportation Improvement Program (STIP), SR-262 has been renamed and signed SR-162. Due to the difficulty and potential confusion resulting from the change in route name, the official name of the project remains the same. When referenced in this DEIS, the project is referred to either with its full name, or as the SR-262 project. However, any reference to individual highways will use the current route number and designation.

The Federal Highway Administration (FHWA), the Navajo Department of Transportation (Navajo DOT), and UDOT are proposing improvements to an 8.5-mile segment of SR-162 from Montezuma Creek to Aneth, Utah. The project also includes improvements to the intersections of SR-162, SR-262, and County Road (CR) 450 in Montezuma Creek (**Figure ES.1**). The project corridor is wholly contained within the Aneth Chapter of the Navajo Nation. The scope of the decision to be made as a result of this DEIS is to identify a transportation solution for SR-162 and the intersections.

ES.2 NEED FOR THE PROJECT

Improvements to SR-162 are needed to address safety concerns resulting primarily from existing deficiencies. Those include, but are not limited to, existing substandard roadway design and projected increases in traffic along the corridor.

In addition to seasonal influxes of traffic along SR-162, school buses make extensive use of the highway making stops in Montezuma Creek, Aneth, and several locations in between. Lengthy traffic queues can develop behind the buses when they stop to load or unload passengers. In addition to school buses, open grazing along the corridor contributes to traffic queues while drivers wait for livestock to cross the road. Open grazing also contributes to accidents along the corridor. Finally, there is limited shoulder width for any vehicles to pull over in an emergency or for other needs.

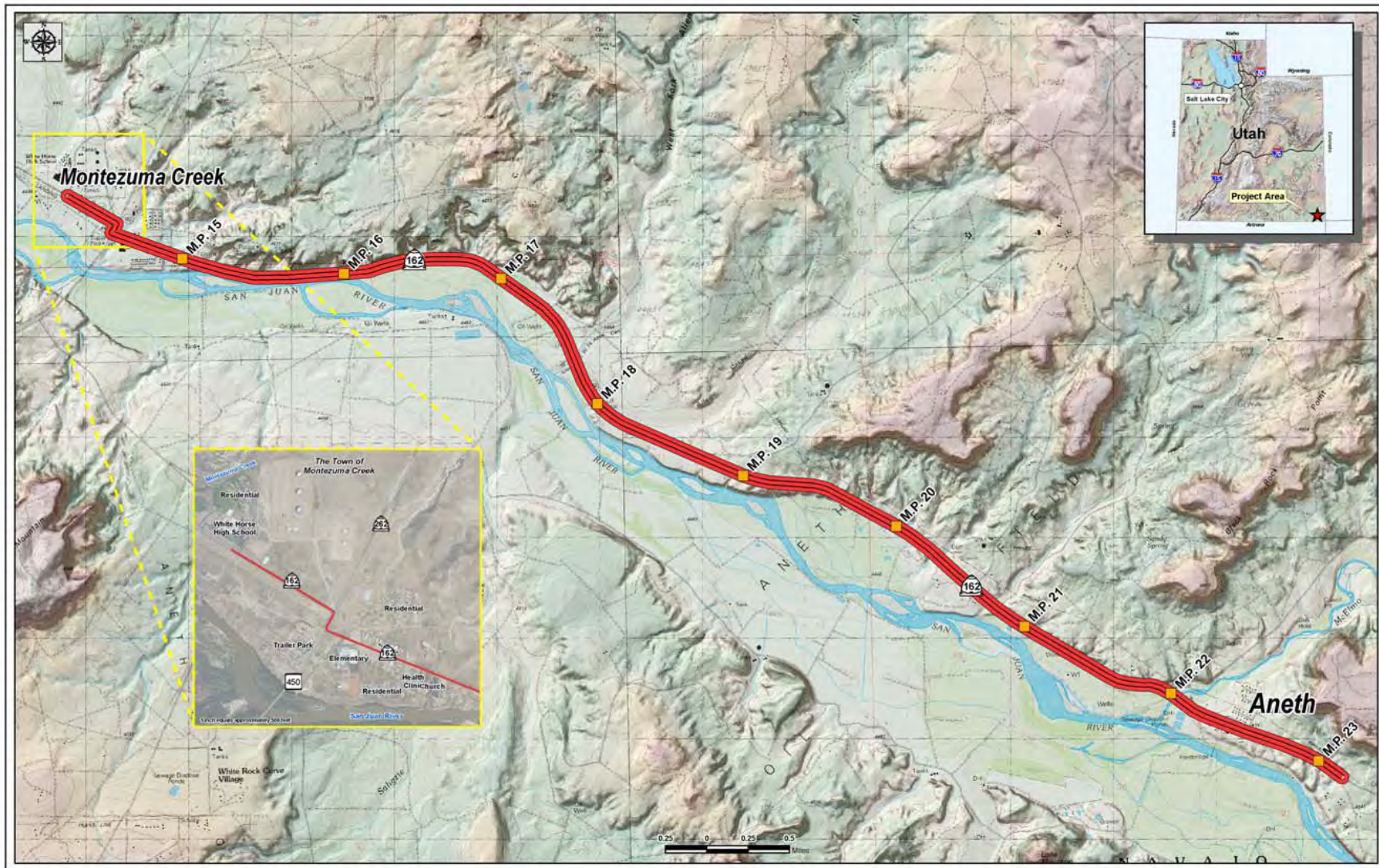


Figure ES.1 – Study Area Map

The approximate cost of the improvements has been estimated for the year 2012 using two different pavement reconstruction options. The full pavement reconstruction option costs approximately \$37.1 million and the pavement reclamation option costs approximately \$32.6 million.

Accident data from the period 2000 to 2004 shows that the 5-year average accident rate for SR-162 was approximately 60 percent lower than expected. However, the accident severity rate was 1.20 times the expected rate.

Because of the physical and operational characteristics of SR-162, many portions of the highway do not meet current UDOT standards for vehicle and pedestrian safety. The characteristics contributing to the need for transportation improvements are documented in the *Existing Conditions Report* (UDOT 2006) and are described in more detail in Chapter 1 – Purpose and Need.

ES.3 PURPOSE OF PROJECT

The purpose of the project is to improve safety for the traveling public along SR-162 (formerly known as SR-262) between Montezuma Creek and Aneth, and at the intersections of SR-162, SR-262, and CR 450 in Montezuma Creek. Specific project objectives include:

- Improve/correct roadway deficiencies to meet current American Association of State and Highway Transportation Officials (AASHTO) guidelines and UDOT design standards
- Reduce the potential for conflicts between the traveling public, pedestrians and animals
- Address the safety concerns of the highway users

Additional objectives for minimizing impacts to the human and natural environment were identified during the project scoping and are applied in the analysis of project alternatives. These include:

- Minimize impacts to cultural resources
- Balance the need for open range grazing with highway safety
- Minimize impacts to the environment
- Work with Navajo Nation to ensure compliance with applicable laws and regulations

ES.4 ALTERNATIVES

Based on the Purpose and Need for the project, a reasonable range of safety improvements were considered. Potential improvements were combined into two groups of alternatives, which are described in the following sections. More detailed descriptions are included in Chapter 2 – Alternatives.

The first group of alternatives focuses on improvements to the intersection of SR-162, SR-262, and CR 450 in Montezuma Creek. There are currently two intersections located approximately 200 feet apart: the intersection of SR-262 and SR-162, and the intersection of SR-162 and CR 450. The distance between the intersections is inadequate under current standards, and creates

the potential for driver confusion and traffic backup into the main travel lanes of SR-162. Three Intersection Build alternatives are designated as Alternatives A, B, and C. The fourth intersection alternative is the No Action alternative. The second group of project alternatives focuses on the alignment and design of the SR-162 roadway between Montezuma Creek and Aneth. These alternatives extend from the intersections in Montezuma Creek to a point approximately 0.5 mile

east of Aneth. The two Highway Build alternatives are designated as Alternative One and Alternative Two. The third alternative is the No Action alternative. The three highway alternatives are described in greater detail in the following sections.

ES.4.1 Intersection Alternatives

ES.4.1.1 Build Alternatives

The three Intersection Build alternatives have several features in common. All three alternatives would eliminate the two closely spaced intersections in Montezuma Creek to create one intersection. The new intersection would provide for free-flowing (i.e., no stop signs) movement of the eastbound and westbound traffic on SR-162, while northbound (SR-262) and southbound (CR 450) traffic would be required to stop.

Improvements under all Intersection Build alternatives would include:

- Widening the northbound and westbound lanes at the intersection from one lane to three lanes
- Widening the southbound and eastbound approaches of the intersection to two lanes
- A 10-foot shoulder, consisting of a 6-foot paved shoulder and a 4-foot unpaved shoulder, which would transition to a 6-foot paved shoulder and 2.5-foot curb, gutter and sidewalk, on all sides of the intersection
- A 10-foot paved shoulder on the south side of SR-162 in front of the Montezuma Creek Elementary School
- Replacement of any existing sidewalks or walkways impacted by the project
- Maintaining all accesses and driveway approaches
- Crossings for school children and pedestrians

All of the Intersection Build alternatives would meet UDOT standards and AASHTO guidelines for alignment; length of turn lanes; shoulder width; signage; and pavement markings. The distinguishing features of the Intersection Build alternatives are summarized below.

Intersection Alternative A - The roadways of both the east and west approaches would be re-aligned. The center of the newly aligned single intersection would be located approximately 87 feet north of the existing SR-162/CR 450 intersection. The west approach of SR-162 would be curved south to connect to the existing east approach of SR-162.

Intersection Alternative B - The new intersection would be located at the current location of the SR-162/SR-262 intersection. It would retain the existing west approach of SR-162 while

realigning the east approach to allow for the free-flow movement of eastbound and westbound traffic.

Intersection Alternative C - The new intersection would be located at the current location of the SR-162/CR 450 intersection, and focus primarily on realignment of the roadway west of the intersection. The intersection of the north-south and east-west roadways would be perpendicular.

ES.4.1.2 No Action Alternative

Under the No Action alternative the intersections of SR-162, SR-262 and CR 450 in Montezuma Creek would remain in their current configuration and condition. Standard maintenance would continue, but there would be no additional improvements.

ES.4.2 Highway Alternatives

ES.4.2.1 Build Alternatives

The Highway Build alternatives are designed to address a number of deficiencies:

- Insufficient clear zone (distance the roadway to the nearest potential hazard)
- Insufficient area for vehicles to safely pull off the road
- Insufficient area for vehicles to make left turns
- Drainage culverts that do not function adequately
- Lack of school bus pullouts
- Potential vehicle conflicts with livestock and wildlife crossing the road
- Insufficient shoulder widths

Proposed improvements common to both alternatives include:

- Shoulders widened to 10 feet (6 feet paved and 4 feet unpaved)
- In the areas where left turn traffic volumes are high, a 10-foot paved shoulder in accordance with UDOT standards
- Retaining walls, barriers and rockfall protection where corridor width is restricted by cliffs to the north or the San Juan River to the south
- Clear zone from 12 feet to 26 feet depending on posted speed limit
- Intersection sight distance increased to meet current AASHTO guidelines
- Several existing drainage culverts replaced and several new culverts installed
- Crossings for domestic livestock and wildlife

The following sections describe the alternatives in greater detail.

Alternative One - Maintain the existing roadway alignment, but widen the roadway from approximately 26 feet to 44 feet. The existing 12-foot travel lanes would be maintained. This alternative would maintain the widened roadway within the existing right of way (ROW).

Alternative Two - Widen the roadway to approximately 44 feet along with several minor (20-foot or less) adjustments to the horizontal alignment to minimize encroachments into environmentally sensitive areas. Additional ROW will be required.

ES.4.2.2 No Action Alternative

Under the No Action alternative, SR-162 between Montezuma Creek and Aneth would remain in its current condition. Standard maintenance would continue, but there would be no additional improvements to the roadway.

ES.5 PREFERRED ALTERNATIVE

Intersection Alternative B and Highway Build Alternative Two have been identified as the Preferred Alternatives by the Joint Leads (FHWA, Navajo DOT, and UDOT) for the proposed project. Intersection Alternative B was recommended as the Preferred Intersection Alternative because it would move SR-162 the furthest distance from Montezuma Creek Elementary School providing more safety for the school children and providing a larger area for busses and cars to pull off of the highway when dropping off and picking up students. Highway Alternative Two was recommended as the Preferred Highway Alternative because it would avoid all Section 4(f) properties.

ES.6 ENVIRONMENTAL IMPACTS

Table ES.1 summarizes potential long-term impacts to environmental resources of the Intersection and Highway Build alternatives. Potential impacts that are not quantifiable are discussed in Chapter 3 – Affected Environment, Environmental Consequences, and Avoidance, Minimization, and Mitigation Measures.

Table ES.1 – Summary of Environmental Impacts by Resource

Impact Category	Build Alternatives				
	Intersection Alt. A	Intersection Alt. B	Intersection Alt. C	Highway Alt. One	Highway Alt. Two
Land Use – Acres converted to Highway use (outside of existing ROW)	3.3	1.8	2.1	15	15
Social Impacts (Distance from the elementary school to SR-162 on the north)	186 feet	484 feet	145 feet	N/A	N/A
Potential Relocations	0	0	0	0	0

Table ES.1 – Summary of Environmental Impacts by Resource (cont.)

Impact Category	Build Alternatives				
	Intersection Alt. A	Intersection Alt. B	Intersection Alt. C	Highway Alt. One	Highway Alt. Two
Air Quality (Impacts)	No meaningful impacts	No meaningful impacts	No meaningful impacts	No meaningful impacts	No meaningful impacts
Noise Impacts (Exceeds thresholds or No Exceedance)	No Exceedance	No Exceedance	No Exceedance	Not Applicable*	Not Applicable *
Hazardous Materials (# of UST or LUST sites potentially impacted)	0	0	0	2 UST 1 LUST	2 UST 1 LUST
Water Quality	No meaningful impacts	No meaningful impacts	No meaningful impacts	No meaningful impacts	No meaningful impacts
Wetlands – Encroachment in acres	0	0	0	0	0
Other Water Features – Drainage channel encroachment (Acres)	0.01	0	0.01	0.861	1.014
Dry Saltcedar/Riparian – Encroachment in Acres	0	0	0	14.64	15.75
Salt Desert Shrubland – Encroachment in Acres	0	0	0	35.76	31.33
Sand Hills – Encroachment in Acres	0	0	0	5.32	6.10
Floodplains – Encroachment in Acres	0	0	0	6.24	7.04

Table ES.1 – Summary of Environmental Impacts by Resource (cont.)

Impact Category	Build Alternatives				
	Intersection Alt. A	Intersection Alt. B	Intersection Alt. C	Highway Alt. One	Highway Alt. Two
Cultural Resources – Number of sites impacted adversely	0	0	0	7	3
Section 4(f) Eligible Sites – Number of sites impacted (Use – other than <i>de minimis</i>)	0	0	0	2	0
Visual Quality – Acres of cliffs/hillsides impacted	0	0	0	3.35	2.06

Source: URS 2008

*This project does not meet Type I project criteria, therefore noise analysis was not conducted. (Refer to Section 3.9.1).

ES.7 Permits and Clearances

Implementation of the Build Alternatives will require the permits and clearances shown in **Table ES.2**.

Table ES.2 Required Permits and Clearances

Permit/Clearance	Granting Agency(ies)	Applicant
<i>Federal Permits, Reviews and Approvals (Including Navajo Nation and BIA)</i>		
Section 404 CWA Individual or Nationwide Permit (decision pending)	USACE, NNEPA	UDOT
Section 401 CWA Water Quality Certification	NNEPA	UDOT
ROW Permit/Application	Navajo Nation and BIA	UDOT
Air Quality Permit	NNEPA	UDOT
Section 7 ESA Concurrence	USFWS, NNDFW	UDOT
Section 106 NHPA	Utah SHPO, NNHPD	UDOT
<i>State Permits, Reviews and Clearances</i>		
Access Permits	TBD*	TBD*
<i>Local permits and Clearances</i>		
Water Use Permit	NN Water Resource Dept. (clarify agency name)	TBD*
Gravel Permits	NN Minerals Dept (clarify agency name)	TBD*

* TBD - To Be Determined

ES.8 Regulatory Compliance

Planning, environmental review, and regulatory compliance for the SR-262 Montezuma Creek to Aneth project is subject to compliance with the following laws and regulations:

- National Environmental Policy Act (42 USC 4321-4347)
- CEQ NEPA Regulations (40 CFR 1500 - 1508)
- FHWA Technical Advisory T6640.8A
- FHWA NEPA Regulations (23 CFR 771, Public Law 85-767)
- Section 4(f) of the Transportation Act of 1966 (49 USC 303)
- Intermodal Surface Transportation Efficiency Act (Public Law 102-240)
- Transportation Equity Act for the 21st Century (Public Law 105-178)

- Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (Public Law 109-59)
- FHWA Noise Abatement Criteria (23 CFR 772)
- Location and Hydraulic Design of encroachments on Flood Plains (23 CFR 650, Subpart A)
- Uniform Relocation Assistance and Real Property Acquisition Policy Act of 1970 (Public Law 91-646)
- Clean Water Act (33 USC 1251)
- Clean Air Act (42 USC 7401)
- Executive Order 11990 - Wetland Protection (42 FR 26961)
- Executive Order 11988 - Floodplain Management (42 FR 26951)
- Executive Order 12898 - Environmental Justice (59 FR 7629)
- Executive Order 13112 - Invasive Species (64 FR 2419)
- Migratory Bird Treaty Act (16 USC 1703-1711)
- Endangered Species Act (16 USC 1531)
- Bald and Golden Eagle Protection Act (16 USC 668-668d, as amended Public Law 86-70, Public Law 87-884, Public Law 92-535, and Public Law 95-616)
- Fish and Wildlife Conservation Act (16 USC 2901-2911)
- National Historic Preservation Act (36 CFR 800) (Public Law 98-665; 16 USC 470 et seq.)
- Section 6(f) of the Land and Water Conservation Fund Act of 1965 (16 USC, Public Law 88-578)
- Resource Conservation and Recovery Act (RCRA) (42 USC §§6901-6992k)
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 USC 103)
- Navajo Nation Comprehensive Environmental Response, Compensation, and Liability Act (Navajo Nation Code Sections 2104-2805), also known as Navajo Superfund Law (NSL) CERCLA
- Emergency Planning and Community Right-to-Know Act (42 USC 116)
- Navajo Nation Environmental Policy Act (Title 4, Navajo Nation Code, Chapter 9)
- Navajo Nation Air Pollution Prevention and Control Act (Enacted by the Navajo Nation Council April 22, 2004)
- Navajo Nation Air Quality Control Program Operating Permit Regulations (Title 4, Navajo Nation Code, Chapter 11, Subchapter 2)

-
- Navajo Nation Clean Water Act (Title 4, Navajo Nation Code, Chapter 13)
 - UDOT Standard Specification Section 01355, Part 1.10 (Discovery of Historical, Archaeological or Paleontological Objects)
 - UDOT Traffic Noise Abatement Policy (UDOT 08A2-1)